

PF 29-NOV-1991; F00953.
 PR 29-NOV-1990; FR-014945.
 PR 29-NOV-1990; FR-014946.
 PA (INRG) INRA INST NAT RECH AGRONOMIQUE.
 PA (TRGE) TRANSGENE SA.
 PI Degryse E, Chaouat G, Charlier M, Charpigny G, Gaye P,
 Martal J, Reinaud P;
 DR WPI; 92-21707/26.
 PT New type I interferon variants with added N-terminal di:peptide -
 include expression cassettes providing high yield in yeast, esp.
 trophoblast derivs. with e.g. anti-luteolytic activity
 PS Claim 7; Page 30; 53pp; French.
 CC The DNA sequence encoding the precursor of ovine trophoblastin was
 disclosed in PCT WO 89/08706 (see R2491); R2492-R2495 are
 isomers of trophobastin. They have anti-luteolytic activity and
 are used to improve survival of transplanted embryos; as a reagent
 for detecting viability of embryos at an early stage of its
 development; and to improve the fertility of livestock.
 SQ Sequence 195 AA;

Query Match 53.3%; Score 64; DB 1; Length 195;
 Best Local Similarity 77.8%; Pred. No. 5.46e+00; 1; Mismatches 1; Indels 0; Gaps 0;
 Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Db 22 LGCVLSQRL 30
 Qy 8 LGCVLXQQL 16

RESULT 3
 ID R24941 standard; Protein: 195 AA.
 AC R24941;
 DT 03-JAN-1992 (first entry)
 DE Sequence of ovine trophoblastin.
 KW Antiviral; antiinflammatory; antitumour; immunomodulator; immunogen;
 trophoblastin; antiluteolytic agent.
 OS Ammotragus lervia.
 FH Key peptide
 FT Location/Qualifiers
 1. .23
 FT /label= signal
 PN WO9209691-A.
 PD 11-JUN-1992.
 PF 29-NOV-1991; F00953.
 PR 29-NOV-1990; FR-014945.
 PR (INRG) INRA INST NAT RECH AGRONOMIQUE.
 PA (TRUE) TRANSGENE SA.
 PI Degryse E, Chaouat G, Charlier M, Charpigny G, Gaye P,
 Martal J, Reinaud P;
 DR WPI; 92-21707/26.
 PT New type I interferon variants with added N-terminal di:peptide -
 include expression cassettes providing high yield in yeast, esp.
 trophoblast derivs. with e.g. anti-luteolytic activity
 PS Disclosure; Fig 1; 53pp; French.
 The DNA sequence encoding the precursor of ovine trophoblastin was
 disclosed in PCT WO 89/08705 (see R2491); R2492-R2495 are
 isomers of trophobastin. They have anti-luteolytic activity and
 are used to improve survival of transplanted embryos; as a reagent
 for detecting viability of embryos at an early stage of its
 development; and to improve the fertility of livestock.
 SQ Sequence 195 AA;

Query Match 53.3%; Score 64; DB 1; Length 195;
 Best Local Similarity 77.8%; Pred. No. 5.46e+00; 1; Mismatches 1; Indels 0; Gaps 0;
 Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Db 22 LGCVLSQRL 30
 Qy 8 LGCVLXQQL 16

RESULT 5
 ID R24945 standard; Protein: 195 AA.
 AC R24945;
 DT 03-JAN-1992 (first entry)
 DE Sequence of ovine trophoblastin variant Xd.
 KW Antiviral; antiinflammatory; antitumour; immunomodulator; immunogen;
 trophoblastin; antiluteolytic agent.
 OS Ammotragus lervia.
 FH Key peptide
 FT Location/Qualifiers
 1. .23
 FT /label= signal
 PN WO9209691-A.
 PD 11-JUN-1992.
 PF 29-NOV-1991; F00953.
 PR 29-NOV-1990; FR-014945.
 PR 29-NOV-1990; FR-014946.
 PR (INRG) INRA INST NAT RECH AGRONOMIQUE.
 PA (TRGE) TRANSGENE SA.
 PI Degryse E, Chaouat G, Charlier M, Charpigny G, Gaye P,
 Martal J, Reinaud P;
 DR WPI; 92-21707/26.
 PT New type I interferon variants with added N-terminal di:peptide -
 include expression cassettes providing high yield in yeast, esp.
 trophoblast derivs. with e.g. anti-luteolytic activity
 PS Claim 7; Page 30; 53pp; French.
 CC The DNA sequence encoding the precursor of ovine trophoblastin was
 disclosed in PCT WO 89/08706 (see R2491); R2492-R2495 are
 isomers of trophobastin. They have anti-luteolytic activity and
 are used to improve survival of transplanted embryos; as a reagent
 for detecting viability of embryos at an early stage of its
 development; and to improve the fertility of livestock.
 SQ Sequence 195 AA;

Query Match 53.3%; Score 64; DB 1; Length 195;
 Best Local Similarity 77.8%; Pred. No. 5.46e+00; 1; Mismatches 1; Indels 0; Gaps 0;
 Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Db 22 LGCVLSQRL 30
 Qy 8 LGCVLXQQL 16

RESULT 4
 ID P91396 standard; protein; 195 AA.

RESULT 6
 ID R24943 standard; Protein; 195 AA.
 AC R24943;
 DT 03-JAN-1992 (first entry)
 DE Sequence of ovine trophoblastin variant xb
 KW antiviral; antiinflammatory; antitumour; immunomodulator; immunogen;
 KW trophoblastin; anti-luteolytic agent.
 OS Ammotragus lervia.
 FH Key Location/Qualifiers
 FT peptide 1..23
 FT /label= signal
 PN WO9209691A.
 PD 11-JUN-1992.
 PF 009953.
 PR 29-NOV-1990; FR-014445.
 PR 29-NOV-1990; FR-014446.
 PA (INRG) INRA INST NAT RECH AGRONOMIQUE.
 PA (TRGE) TRANSGEN SA.
 PI Degrise E, Chaouat G, Charlier M, Charpigny G, Gaye P,
 Martial J, Reinaud P;
 DR 92-21070/26.
 PT New type I interferon variants with added N-terminal di:peptide -
 include expression cassettes providing high yield in yeast, esp.
 PT trophoblast derivs. with e.g. anti-luteolytic activity
 PS Claim 7; Page 30; 55pp; French.
 CC The DNA sequence encoding the precursor of ovine trophoblastin was
 CC disclosed in PCT WO 89/08706 (see R24941). R24942;R24945 are
 CC isoforms of trophoblastin. They have anti-luteolytic activity and
 CC are used to improve survival of transplanted embryos; as a reagent
 CC for detecting viability of embryos at an early stage of its
 CC development; and to improve the fertility of livestock.
 SQ Sequence 195 AA;

Query Match 50.0% Score 60; DB 1; Length 195;
 Best Local Similarity 66.7%; Pred. No. 1 58e+01;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Db 22 LGCYIUSERL 30
 AC W62839;
 DT 27-OCT-1998 (first entry)
 Qy 8 LGCYIAXQQL 16

RESULT 7
 ID W62839 standard; Protein; 23 AA.
 AC W62839;
 DT 27-OCT-1998 (first entry)
 DE Stenocarpus sinuatus antimicrobial protein.
 KW antimicrobial protein; infestation; control.
 OS Stenocarpus sinuatus.
 PN WO927805A1.
 PD 02-JUL-1998.
 PR 22-DEC-1997; AU-0874.
 PR 20-DEC-1996; AU-004175.
 PA (REIR) COOP RES CENR TROPICAL PLANT PATHOLOGY.
 PI Bower NI, Goultier KC, Green JT, Manners JM, Marcus JP;
 DR WPI; 98-37279/32.
 PT Novel anti-microbial protein from e.g. Macadamia integrifolia -
 PT useful for controlling microbial infestations of plants or mammals
 PT Claim 1; Page 65; 90pp; English.
 CC The sequence is that of an antimicrobial protein which can
 CC be used to control microbial infestations in plants and mammalian
 CC animals.
 SQ Sequence 23 AA;

Query Match 49.2% Score 59; DB 1; Length 23;
 Best Local Similarity 61.5%; Pred. No. 2.05e+01; Length 23;
 Matches 8; Conservative 2; Mismatches 2; Indels 1; Gaps 1;

Db 10 RGEIICYRCQ 22
 Qy 4 RSQIIGCY-LXQQ 15

RESULT 8
 ID Y03782 standard; Protein; 135 AA.
 AC Y03782;
 DT 11-JUN-1999 (first entry)
 DE S. aureus polypeptide.
 KW Staphylococcus aureus polypeptide; thyroiditis; infective carditis;
 KW lung abscess; serotory diarrhoea; cerebral abscess; conjunctivitis;
 KW toxic shock syndrome; folliculitis; septic arthritis; antibacterial;
 KW H pylori infection; gastric ulcer; adenocarcinoma.
 OS Staphylococcus aureus.
 PN EP-905243-A2.
 PD 31-MAR-1999.
 PF 03-AUG-1998; 306185.
 PR 05-AUG-1997; US-055387.
 PA (SMIK) SMITHKLINE BEECHAM CORP.
 PI (SMIK) SMITHKLINE BEECHAM PLC.
 DR Burnham MCR, Lonetto MA, Warren PV;
 DR WPI; 99-192667/17.
 PT N-PSD; X31852.
 PT New essential polypeptides from Staphylococcus aureus useful for
 PT treating diseases such as infective endocarditis and toxic shock
 PS syndrome.
 PT Claim 11; Page 24-25; 70pp; English.
 CC The invention provides new Staphylococcus aureus polypeptides (Y03781-94)
 CC and the genes (X31851-864) encoding them. Host cells containing vectors
 CC comprising the nucleic acid sequences are used for the recombinant
 CC expression of the proteins. The polypeptides can be used to screen for
 CC modulators for use in antibacterial therapy. The polypeptides, their
 CC antagonists and agonists are used to prevent or treat diseases caused by
 CC S. aureus such as thyroditis, lung abscesses, infective carditis,
 CC secretory diarrhoea, cerebral abscesses, conjunctivitis, toxic shock
 CC syndrome, folliculitis and septic arthritis. Screening for the presence of
 CC the polypeptides may be used to diagnose, predict the susceptibility to,
 CC or stage the progress of these S. aureus diseases and diseases caused by
 CC Helicobacter pylori such as gastric ulcers and gastric adenocarcinoma.
 CC There is not much information known about the essential genes expressed
 CC by S. aureus during infection but these new polypeptides have been
 CC identified as essential. They can therefore be used to develop
 CC antibacterial compounds specific for those essential genes and this
 CC ensures the effectiveness of the compounds in killing S. aureus. In
 CC addition, these polypeptides can be used to effectively diagnose and
 CC treat infections and diseases caused by S. aureus without the risk of
 CC development of antibiotic resistance. The present sequence represents a
 CC S. aureus polypeptide which has homology to a B. subtilis probable
 CC sequence 135 AA;

Query Match 49.2% Score 59; DB 1; Length 135;
 Best Local Similarity 43.8%; Pred. No. 2.05e+01; Length 135;
 Matches 7; Conservative 3; Mismatches 6; Indels 0; Gaps 0;

Db 42 HMRKTSIGVLYKOF 57
 Qy 1 QRHRSQILGCVLYQQL 16

RESULT 9
 ID R70029 standard; Protein; 377 AA.
 AC R70029;
 DT 29-SEP-1995 (first entry)
 DE Tobacco cluster-A protein encoded by genomic clone.
 KW Tobacco; Chitinase; antifungal; fungicide; Cluster-A.
 OS Nicotiana tabacum.
 FH Key Location/Qualifiers
 FT peptide 1..25
 FT /label= signal peptide
 FT misc_difference 28..29
 FT misc_difference /note= "cDNA encodes additional lle here"
 FT misc_difference 188..201
 FT misc_difference /label= Determined by sequencing the protein
 FT misc_difference 222..247
 PN EP-639642-A. /note= "Determined by sequencing the protein"

PD 22-FEB-1995; Score 56; DB 1; Length 238; Pred. No. 3.44e+01; Best Local Similarity 66.7%; Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

PF 17-AUG-1993; Score 57; DB 1; Length 195; Pred. No. 4.46e+01; Best Local Similarity 54.5%; Matches 6; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

PR (MOGE-) MOGEN INT NV. (UTLE-) RIJKSUNIV LEIDEN.

PA Apotheker-de Groot M, Bol JP, Cornelissen BJC, Linthorst HJM; PI Melchers LS, Ponstein AS, Sela-buurlage MB; PI WPI; 95-083454/12.

DR NP-PSDB: 082976.

PT New plant protein having endo-chitinase activity - used in antifungal compns. and to develop transformed plants which are less susceptible to fungal infection.

PT Claim 3; Page 25-28; 43PP; English.

PS 22 LGCYLSRKL 30

CC Screening of a lambda ZAP cDNA library of TMV-infected Samsun NN tobacco plants with a probe derived from PROB40 (a partial Cluster-A cDNA clone) resulted in the isolated of 11 positively hybridising clones. Analysis revealed that all were identical and correspond to Cluster-A cDNA. The sequence of cDNA clone CA-3 is given in Q82973/ R04540. A genomic library of *N. tabacum* was screened using the Cluster-A cDNA insert of clone CA-3 as a probe (see Q82977, Q82978).

CC The complete nt. sequence of Cluster-A cDNA including the deduced primary structure of the Cluster-A protein in the 5' and 3' UTR regions of the gene are shown in Q82976/R04529. Comparison of the cDNA clone with the Cluster-A gene revealed that these sequences share a high degree of identity (94%). The Cluster-A precursor protein contains a putative signal peptide as well as 4 potential N-linked glycosylation sites (N-X-S/T). The predicted mature protein has a calculated mol. wt. of 39,033 Da.

SQ Sequence 377 AA;

Query Match Best Local Similarity 49.2%; Score 59; DB 1; Length 377; Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Db 11 IFSCFLQQL 20

Qy 7 ILGCYLYQQL 16

RESULT 10

ID R24942 standard; Protein; 195 AA.

AC R24942;

DT 03-JAN-1992 (first entry)

DE Sequence of ovine trophoblastin variant Xa.

KW Antiviral; antiinflammatory; antitumour; immunomodulator; immunogen; trophoblastin; antiluteolytic agent.

OS *Ammotragus lervia*

FH Key Location/Qualifiers

FT peptide 1; 23

FT /label= signal

FT WO9209691-A.

PR 29-NOV-1990; FR-014945.

PR 29-NOV-1990; FR-014946.

PR (INRG) INRA INST NAT RECH AGRONOMIQUE.

PA (TRGE) TRANSGENE SA.

PI Degryse E, Chaouat G, Charpigny G, Gaye P,

PI Martal J, Reynaud P,

DR WPI; 92-217070/26.

PT New type I interferon variants with added N-terminal di-peptide - include expression cassettes providing high yield in yeast, esp. trophoblast derive, with e.g. anti-luteolytic activity

PT PCT WO 88908706 (see R24941). R24942-R24945 are isoforms of trophoblastin. They have anti-luteolytic activity and are used to improve survival of transplanted embryos; as a reagent for detecting viability of embryos at an early stage of its development; and to improve the fertility of livestock.

SQ Sequence 195 AA;

Query Match Best Local Similarity 47.5%; Score 57; DB 1; Length 195; Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Db 22 LGCYLSRKL 30

Qy 8 ILGCYLYQQL 16

RESULT 12

ID W81981 standard; Protein; 238 AA.

AC W81981;

DT 02-MAR-1999 (first entry)

DE *Enrichia* sp. E82.3 protein.

KW Granulocytic ehrlichia; GE; E82; tick-borne infection; fatal; vaccine; immune response; detection; diagnosis; Ehrlichiosis.

OS *Ehrlichia* sp.

PN WO9849312-A2.

PR 24-APR-1998; U08364.

PR 25-APR-1997; US-044869.

PR (AQUI-) AQUILA BIOPHARMACEUTICALS INC.

PI Deltz G, Coughlin RT, Murphy C, Storey J;

DR WPI; 98-034663/03.

DR NP-PSDB: V65142.

PT New isolated granulocytic ehrlichia nucleic acids - used to develop products for use in vaccines for inhibiting Ehrlichiosis and for use in detection and diagnosis.

PT Claim 1a; Fig 10; 18PP; English.

CC This sequence encodes the E82.3 protein which is associated with and has been isolated from HEK293 cells infected with *Ehrlichia* sp. GE is an acute potentially fatal tick borne infection and the proteins described in this invention can be used in vaccines to elicit a beneficial immune response in an animal to GE. They can be used for inhibiting Ehrlichiosis in an animal. The products can also be used for detection and diagnosis.

SQ Sequence 238 AA;

Query Match Best Local Similarity 66.7%; Score 56; DB 1; Length 238; Pred. No. 3.44e+01; Best Local Similarity 66.7%; Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

PS 8 LSCYLYQQL 15

Db 204 QILGFYFLHRHL 214
PT ||||:| :| :|
Qy 6 QILGFYFLXQQL 16

RESULT 13
ID W28096 standard; Protein: 111 AA.
AC W28096;
DT 01-SEP-1998 (first entry)
DE Staphylococcus aureus protein of unknown function.
CC Staphylococcus aureus protein; ribozyme; antisense sequence; control;
KW Staphylococcal gene; regulatory element; bacterial gene expression;
KW vaccine; Staphylococcal infection; food poisoning; scaled skin syndrome;
KW toxic shock syndrome.
OS Staphylococcus aureus.
FH Key
FT Misc_difference 1. 111 "residues designated X are not defined in
FT /note= "the specification"
FT Sequence 222 AA;
PN WO9730070-A1.
PD 21-AUG-1997.
PF 19-FEB-1997; U02318
PR 20-FEB-1996; US-011888.
PA (SMIK) SMITHKLINE Beecham CORP.
PI Black MT, Burnham MK, Hodgson JE, Knowles DJC, Nicholas RO,
DI Pratt JM, Reichard RW, Rosenberg M, Ward JM;
DR N-PSDB; T84032.
PT Novel polypeptide(s) from Staphylococcus aureus strain WCUH29 - used
PT to isolate antimicrobial compounds, and in vaccines against S.
PT aureus infection
PS Claim 6; Page 463; 98pp; English.
CC The present sequence represents a Staphylococcus aureus protein of
CC unknown function. The DNA sequence was isolated from a library of
CC clones of S. aureus WCuh 29 in Escherichia coli. The DNA sequence can
CC be used in the construction of ribozymes and antisense sequences to
CC control the expression of Staphylococcal genes. The DNA sequence is
CC also useful as a source of regulatory elements for the control of
CC bacterial gene expression. The present protein may be used to produce
CC vaccines to enable a host to produce specific antibodies with
CC antibacterial action. These vaccines and antibodies would protect
CC a host against invasion by S. aureus, and conditions relating to
CC Staphylococcal infection, e.g. Staphylococcal food poisoning, scaled
CC skin syndrome; and toxic shock syndrome.
Qy Sequence 111 AA;

Query Match Best Local Similarity 45.8%; Score 55; DB 1; Length 222;
Matches 5; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
PT Score 55; DB 1; Length 111;
PT Best Local Similarity 85.7%; Score 85.7%; DB 1; Length 111;
PT Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 7 CYLKQQL 13
PT |||||
Qy 10 CYLKQQL 16

RESULT 14
ID Y05539 standard; Protein: 222 AA.
AC Y05539;
DT 05-JUL-1999 (first entry)
DE Wheat Type I glutathione transferase subunit IC2.
KW Glutathione transferase; GST; glutathione peroxidase; wheat; WIC2;
KW IC2; herbicide resistance; transgenic plant.
OS Triticum aestivum.
PN WO9914337-A2.
PD 25-MAR-1999.
PF 16-SEP-1998; GB2802-
PR 16-SEP-1997; GB-0197-27.
PA (RHON) RHONE-POULENC AGRIC LTD.
PI Cole DJ, Cummins I, Edwards R;
DI WPI: 99-244035/20.
DR N-PSDB; X23146.
PT New isolated glutathione transferase subunit polynucleotides

RESULT 15
ID W5695 standard; Protein: 396 AA.
AC W5695;
DT 24-JUL-1998 (first entry)
DE Tetracycline resistance sequence contained in plasmid pRZTLL1.
CC Tn5 transposase; modified; enzyme; in vitro transposition; mutant;
CC target; marker; transposon 5; plasmid pRZTLL1; tetracycline resistance.
OS Synthetic
OS Escherichia coli.
PN WO9810077-A1.
PD 12-MAR-1998.
PF 09-SEP-1997; U15941.
PR 02-MAY-1997; US-8508880.
PR 09-SEP-1996; US-814877.
PA (WISC) WISCONSIN ALUMNI RES FOUND.
PI Goryshin IY, Reznikoff WS, Zhou H;
DR WPI: 98-193627/17.
DR N-PSDB; V28398.
PT Modified Tn5 transposase construct used in novel system for in vitro
PT transposition - used to, e.g. create absolute defective mutants.
PT provide selective markers and to facilitate insertion of specialised
PT DNA sequences into target DNA.
PS Disclosure: Pages 35-46; 7-3pp; English.
CC This tetracycline resistance sequence is contained in the plasmid
CC pRZTLL1 which is used to demonstrate in vitro transposition of a
CC transposable element located between a pair of Tn5 (transposon 5)
CC outside end (OE) termini. The invention provides a genetic construct
CC that contains a nucleotide sequence encoding a modified Tn5 transposase
CC enzyme that has both greater avidity for Tn5 OE repeats and is less
CC likely to assume an inactive multimeric form than a wild type Tn5
CC transposase and a transposable DNA sequence flanked at its 5', and 3' ends
CC by an 18 or 19 base pair flanking DNA sequence comprising nucleotide A
CC at position 10, T at 11 and A at 12. The modified Tn5 transposase and
CC the transposable DNA which is a DNA donor molecule are used in a system
CC for in vitro transposition. The system and method can be used to create
CC absolute defective mutants, to provide selective markers to target DNA,
CC to provide portable regions of homology to a target DNA, to facilitate
CC insertion of specialised DNA sequences into target DNA, to provide primer
CC binding sites or tags for DNA sequencing, to facilitate production of
CC genetic fusion for gene expression studies and protein domain mapping, as
CC well as to bring together other desired combinations of DNA sequences
CC (combinatorial genetics). The modified Tn5 transposase facilitates in
CC vitro transposition reaction rates of at least about 100-fold higher

CC than can be achieved using wild type transposase (as measure in vivo).
CC In vitro transposition using this system can also use donor DNA and
CC target DNA that is circular or linear. The system also requires no
CC outside high energy source and no other protein other than the modified
CC transposase.

SQ Sequence 396 AA;
Query Match 45.8%; Score 55; DB 1; Length 396;
Best Local Similarity 55.6%; Pred. No. 5.75e+01; Mismatches 1; Indels 0; Gaps 0;
Matches 5; Conservative 3;
Db 1/5 LLGCFMDE 183
Qy :|||:||:
7 ILGCVYXQQ 15

Search completed: Sat May 13 09:17:07 2000
Job time : 7 secs.